

Pipeline and Hazardous Materials Safety Administration 400 Seventh Street, S.W. Washington, D.C. 20590

## COMPETENT AUTHORITY CERTIFICATION FOR A TYPE B(U)

RADIOACTIVE MATERIALS PACKAGE DESIGN CERTIFICATE USA/9282/B(U)-96, REVISION 2

This certifies that the radioactive materials package design described below has been certified by the Competent Authority of the United States as meeting the regulatory requirements for a Type B(U) packaging for radioactive materials as prescribed in the regulations of the International Atomic Energy Agency<sup>1</sup> and the United States of America<sup>2</sup>.

- 1. Package Identification Source Production & Equipment Co., Inc., Model No. SPEC-300.
- 2. <u>Packaging Description and Authorized Radioactive Contents</u> as described in U. S. Nuclear Regulatory Commission Certificate of Compliance No. 9282, Revision 1 (attached).
- 3. General Conditions
  - a. Each user of this certificate must have in his possession a copy of this certificate and all documents necessary to properly prepare the package for transportation. The user shall prepare the package for shipment in accordance with the documentation and applicable regulations.
  - b. Each user of this certificate, other than the original petitioner, shall register his identity in writing to the Office of Hazardous Materials Technology, (DHM-23), Pipeline and Hazardous Materials Administration, U.S. Department of Transportation, Washington D.C. 20590-0001.
  - c. This certificate does not relieve any consignor or carrier from compliance with any requirement of the Government of any country through or into which the package is to be transported.

<sup>&</sup>quot;Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

 $<sup>^{2}\,</sup>$  Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

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- d. Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations¹ shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
- 4. Marking and Labeling The package shall bear the marking USA/9282/B(U)-96, in addition to other required markings and labeling.
- 5. Expiration Date This certificate expires on April 30, 2010.

This certificate is issued in accordance with paragraph 808 of the IAEA Regulations and Section 173.471 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated March 14, 2005 submitted by Source Production & Equipment Co., Inc., St. Rose, LA, and in consideration of other information on file in this Office.

Certified by:

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APR 2 9 2005

(DATE)

Associate Administrator for Hazardous Materials Safety

Revision 2 - Issued to endorse U. S. Nuclear Regulatory Commission Certificate of Compliance No. 9282, Revision 1, and to extend the expiration date.

NRC FORM 618			U.S. NUCLEAR REG	ULATORY	COMM	ISSION			
(8-2000) 10 CFA 77 CERTIFICATE OF COMPLIANCE									
FOR RADIOACTIVE MATERIAL PACKAGES									
1. R. CERTIFICATE NUMBER	b. REVISION NUMBER	c. DOCKET NUMBER	d, PACKAGE IDENTIFICATION NUMBER	PAGE		PAGES			
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#### 2. PREAMBLE

- a. This certificate is issued to certify that the package (packaging and contents) described in Item 5 below meets the applicable safety standards set forth in Title 10, Code of Federal Regulations, Part 71, "Packaging and Transportation of Radioactive Material."
- b. This certificate does not relieve the consignor from compliance with any requirement of the regulations of the U.S. Department of Transportation or other applicable regulatory agencies, including the government of any country through or into which the package will be transported.
- 3. THIS CERTIFICATE IS ISSUED ON THE BASIS OF A SAFETY ANALYSIS REPORT OF THE PACKAGE DESIGN OR APPLICATION
  - a. ISSUED TO (Name and Address)
     Source Production
     and Equipment Company, Inc.
     113 Teal Street
     St. Rose, LA 70087-9691
- b. TITLE AND IDENTIFICATION OF REPORT OR APPLICATION
  Source Production and Equipment Company, Inc.
  application dated June 28, 1999, as supplemented

## 4. CONDITIONS

This certificate is conditional upon to the requirements of 10 CFR Part 71, as applicable, and the conditions specified below.

(a) Packaging

- (1) Model No SPEC-300
- (2) Description

The SPEC-300 is a registrephic device that consists of a source assembly, a depleted uranium shield, and a stainless steel enclosure. The radioactive source assembly is housed in a zircaloy or tranium "S" tube that is surrounded by the depleted uranium shield. The depleted uranium shield is secured in the stainless steel enclosure. The void space between the depleted uranium shield and the enclosure is filled with high density polyurethane foam. The package is approximately 26 inches long, 14 inches wide, and 15 inches high. The maximum gross weight of the package is 780 pounds.

(3) Drawings

The packaging is constructed and assembled in accordance with Source Production and Equipment Co., Inc. General Arrangement drawings: 19B000 sheets 1-8, Rev. 4 and B190700 sheet 1, Rev. 3.

- (b) Contents
  - (1) Type and form of material

Cobalt-60 sources which meet the requirements of special form radioactive material.

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- 5.(b) Contents (continued)
  - (2) Maximum quantity of material per package

300 Curies (output)

Output curies are determined in accordance with American National Standard N432-1980, "Radiological Safety for the Design and Construction of Apparatus for Gamma Radiography."

- The source shall be secured in the shielded position of the packaging by the source assembly lock, lock cap and safety plug assembly fine safety plug assembly, lock cap and source assembly must be fabricated of materials capable of resisting a 1475 °F fire environment for one-half hour and maintaining their positioning function. The locking ball of the source assembly must engage the locking device. The flexible cable of the source assembly and safety plug assembly must be of sufficient length and diameter to provide positive positioning of the source in the shielded position.
- 7. The name plate most be fabricated of materials capable of sisting the fire test of 10 CFR Part 71 and maintaining its legibility.
- 8. In addition to the requirements of Suppart G of 10 CFR Part
  - (a) The package shall be prepared to ship mental the operating Procedures in Chapter 7.0 of the ship cation, as ship denied; and
  - (b) The package must meet the Acceptance less and Maintenance Program of Chapter 8.0 of the application, as supplemented.
- 9. Packagings may be marked with Package Identification Number USA/9282/B(U)-85 until April 30, 2006, and must be marked with Package Identification Number USA/9282/B(U)-96 after April 30, 2006.
- 10. The package authorized by this certificate is hereby approved for use under the general license provisions of 10 CFR 71.17.
- 11. Expiration date: April 30, 2010.

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(9-2000) CERTIFICATE OF COMPLIANCE									
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# **REFERENCES**

Source Production and Equipment Company, Inc., application dated June 28, 1999.

Supplements dated: October 6, November 4, November 22, and December 15, 1999; February 29 and March 27, 2000; and March 14, 2005.

FOR THE U.S. NUCLEAR REGULATORY COMMISSION

Robert J. Lewis, Chief Licensing Section

Spent Fuel Project Office Office of Nuclear Material Safet

and Saleguards

Date: 28 Apr. 12005